



<b>500 SERIES FOOD WASTE DISPOSERS</b>
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**MAINTENANCE MANUAL  
PLEASE LEAVE WITH OPERATOR**



<b>523 SERIES 17</b>	<b>525 SERIES 17</b>	<b>526 SERIES 17</b>
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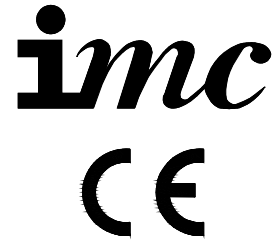
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**A34/020 R7**

**ECN 7908 November 2012**

**EC DECLARATION OF CONFORMITY**

(Guarantee of Production Quality)



We, Imperial Machine Company Limited of:  
Unit 1, Abbey Road, Wrexham Industrial Estate, Wrexham, LL13 9RF  
Declare under our sole responsibility that the machines:

**523 – SERIES 17**

**525 – SERIES 17**

**526 – SERIES 17**

As described in the attached technical documentation is in conformity with the Machinery Directive 98/37/EC (formerly 89/392/EEC) and is manufactured under a quality system BS EN ISO 9001. It is also in conformity with the protection requirements of the Electro Magnetic Compatibility Directive 2004/108/EC and is manufactured in accordance with harmonised standards EN61000-6-1:2001 Immunity and EN61000-6-3: 2001 Emissions (plus product specific standards).

IMC's product range also satisfy the essential health and safety requirements of the Low Voltage Directive 2006/95/EC and are manufactured in accordance with standards BS EN 60335-1 and relevant product specific standards.

Approved by S Witt, Engineering Manager

A handwritten signature in black ink, appearing to be 'S Witt', written over a horizontal line.

Signed at Wrexham, Date

November 2012

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## **GUARANTEE**

This machine is guaranteed by IMC for 1 Year from the date of purchase from IMC or from one of its stockists, dealers or distributors.

The guarantee is limited to the replacement of faulty parts or products and excludes any consequential loss or expense incurred by purchasers. Defects which arise from faulty installation, inadequate maintenance, incorrect use, connection to the wrong electricity supply or fair wear and tear are not covered by the guarantee.

## **PLEASE OBSERVE THESE INSTRUCTIONS CAREFULLY**

This guarantee applies in this form to installations within the UK only.

## **WASTE OUTLET CONNECTION**

All 500 Series Disposers are fitted with a neoprene housing which is designed to couple to a 42mm copper or plastic fitting, lead piping should not be used. The size of the waste outlet must not be reduced. A running trap should be fitted although 'P' or 'S' type traps can be used. Do not fit a bottle trap. The length of run between the machine and the main junction must be kept to a minimum and the pipe must have a positive fall of at least 1 in 7. Changes of direction should be made with swept bends rather than elbows, and cleaning eyes should be fitted where possible, in accordance with standard plumbing practice.

The waste outlet position can be changed by loosening the hose clip at the top of the neoprene housing. The motor and housing can then be rotated until the outlet is in the required position. Tighten the hose clip once the outlet is in the required position.

All Waste Disposers must have an independent drain pipe that does not also serve sinks, dishwashers or similar equipment. The end of the waste pipe must be beyond any grease traps and if the outlet feeds into an outside gully, the pipe should enter the gully below the covering grid. Use a back entry yard gully.

When fitting the trap make certain that the top invert of the trap lies below the rubber outlet spout of the waste disposer. Failure to do this will prevent the machine from draining completely. Also ensure that on all models the outlet tail does not enter the outlet spout beyond the register, if this tail is fitted to deeply into the spout it will obstruct the outlet flow

The 523 Disposer is sink mounted and the neoprene housing contains an inlet boss for the sink overflow near the top of the housing. If this is required the center of boss needs to be cutout before the overflow is connected.

## WATER SUPPLY CONNECTION

A cold water supply with a minimum head of 4m is required on the 525 and 526 Disposers. This is connected to the units at the solenoid valve using a 15mm compression joint, supplied with the machine. A stopcock should be fitted to the water supply. The 523 disposer draws its water supply from the sink tap.

The 500 series machine is to be fed by a cistern tank not mains water supply.

## ELECTRICAL CONNECTION

All electrical work must be carried out by a qualified electrician and in accordance with the IEE Codes of Practice. Examine the rating plate attached to the motor to ensure that the characteristics shown are correct for the supply available. The cables fitted to the controller are the minimum required for individual connection to the mains supply. Site conditions may vary with additional length of cable run, encapsulation in trunking, bunched with other cables etc. Should this apply, the electrician must alter the cable accordingly.

All machines are supplied with a starter with forward, reverse and stop buttons. Where automatic water control is supplied the starter also controls the water flow. This unit must be connected to the mains supply using the starter provided. Omission of the starter eliminates overload protection for the motor and will invalidate the guarantee.

The 500 Series Disposers should be connected to a 30A isolator providing at least 3mm separation in all poles. The table below illustrates typical fuse ratings for an ambient temperature of 25 to 35°C. Should the environment temperature be greater than this, adjust accordingly.

Voltage	Full Load Current	Fuse Rating per Phase
230 – 1 – 50	5.0 Amps	13 Amps
115 – 1 – 60	10.0 Amps	13 Amps
220 – 1 – 60	5.6 Amps	13 Amps
254 – 1 – 60	5.2 Amps	13 Amps
400 – 3 – 50	1.7 Amps	5 Amps
220 – 3 – 50	3.0 Amps	5 Amps
230 – 3 – 60	2.7 Amps	5 Amps
440/460 – 3 – 60	1.7 Amps	5 Amps

The supply to the machine must also be protected by a 30mA RCD.

**Warning: This appliance must be earthed.**

If the supply cord becomes damaged it must be replaced by qualified electrician in order to avoid a hazard.

## RELEASING A JAM

Food Waste Disposers can jam under overload or if unsuitable materials are placed inside. IMC machines are designed to withstand this and no damage will normally result as the machine will switch itself off. It is necessary to clear the jam as follows:

1. Switch off at the mains isolating switch.
2. Remove the baffle by unscrewing the interlock knob and lifting off.
3. Take out any bulk waste in the disposal chamber. Rubber gloves are recommended
4. If the item which blocked the disposer is apparent, remove it.
5. A release wrench is provided with which to turn the rotor if it is jammed. Place the hexagon socket of the wrench over the hexagonal boss on the centre of the rotor and lever backwards and forwards until the jammed material releases. Remove the release wrench and pull out the material.
6. Replace the wrench, engaging the hexagon and ensure that the rotor is totally free throughout its full rotation.
7. Remove the release wrench
8. Replace the baffle, screwing the interlock knob fully home.
9. Switch on at the mains isolating switch.
10. Press the START button and continue disposal.

## NOTE

Single phase motors have a thermal overload switch built into the motor. If a jam occurs and the motor cuts out then a cool down period of approximately 40 minutes will be required before the unit will restart. The thermal overload will reset itself during this period. Do not try and restart the FWD before the 40 minute time period is over and the motor has cooled down. Doing so could cause unnecessary damage to the motor.

**FAULT DIAGNOSIS****Machine does not start**

Cause	Action
Electrical supply is not turned on.	Switch on supply.
The fuses have blown or the circuit breaker has tripped.	Call site electrician to change fuse or reset circuit breaker. If problem persists contact service personnel.
Baffle is not correctly fitted.	Check baffle is secured. If problem persists contact service personnel.

**Unexpected system stop**

Cause	Action
Electrical supply turned off.	Switch on supply.
The fuses have blown or the circuit breaker has tripped.	Call site electrician to change fuse or reset circuit breaker. If problem persists contact service personnel.
Baffle is not correctly fitted.	Check baffle is secured. If problem persists contact service personnel.
Waste jammed in disposer grinding unit.	Remove blockage from grinding unit. See instructions on page 3.
Motor overload has tripped.	Allow motor to cool for 10 minutes and restart. If problem persists contact service personnel.

**Waste not processed**

Cause	Action
A blockage has occurred in the waste pipe.	Clear blockage from waste pipe

## MAINTENANCE

### 12 Monthly, All models

Check for bearing wear by the sound of motor and side to side movement of rotor.

**WARNING – BEFORE ATTEMPTING SERVICE WORK ENSURE THAT ELECTRICITY AND WATER SUPPLIES ARE TURNED OFF AT THE MAIN SUPPLY AND STOP COCK**

### ORDERING SPARE PARTS:

In the event that spare parts or accessories need to be ordered, please always quote the SERIES AND SERIAL NUMBER of the machine. This is to be found on the rating plate located near the supply cable. For installations outside the UK please contact your supplier.

For information on IMC spares and service support (if applicable), please call IMC on +44 (0)1978 661155. Alternatively, contact us via email or fax:

IMC Service Desk

Fax: +44 (0)1978 667766

E-mail: [service@imco.co.uk](mailto:service@imco.co.uk)

IMC Spares Desk

Fax: +44 (0)1978 667759

E-mail: [spares@imco.co.uk](mailto:spares@imco.co.uk)

## MATERIAL CONTENT

The 500 Series disposers contain the following material:

Metals	Stainless steel, mild steel, brass and copper.
Plastics and rubber	Neoprene rubber. ABS and nylon
Other	Electrical components



WIRING DIAGRAMS

Figure 1 - Wiring Diagram, Single Phase

For supply: 230 – 1 – 50, 115 – 1 – 60, 220 – 1 – 60 & 254 – 1 – 60

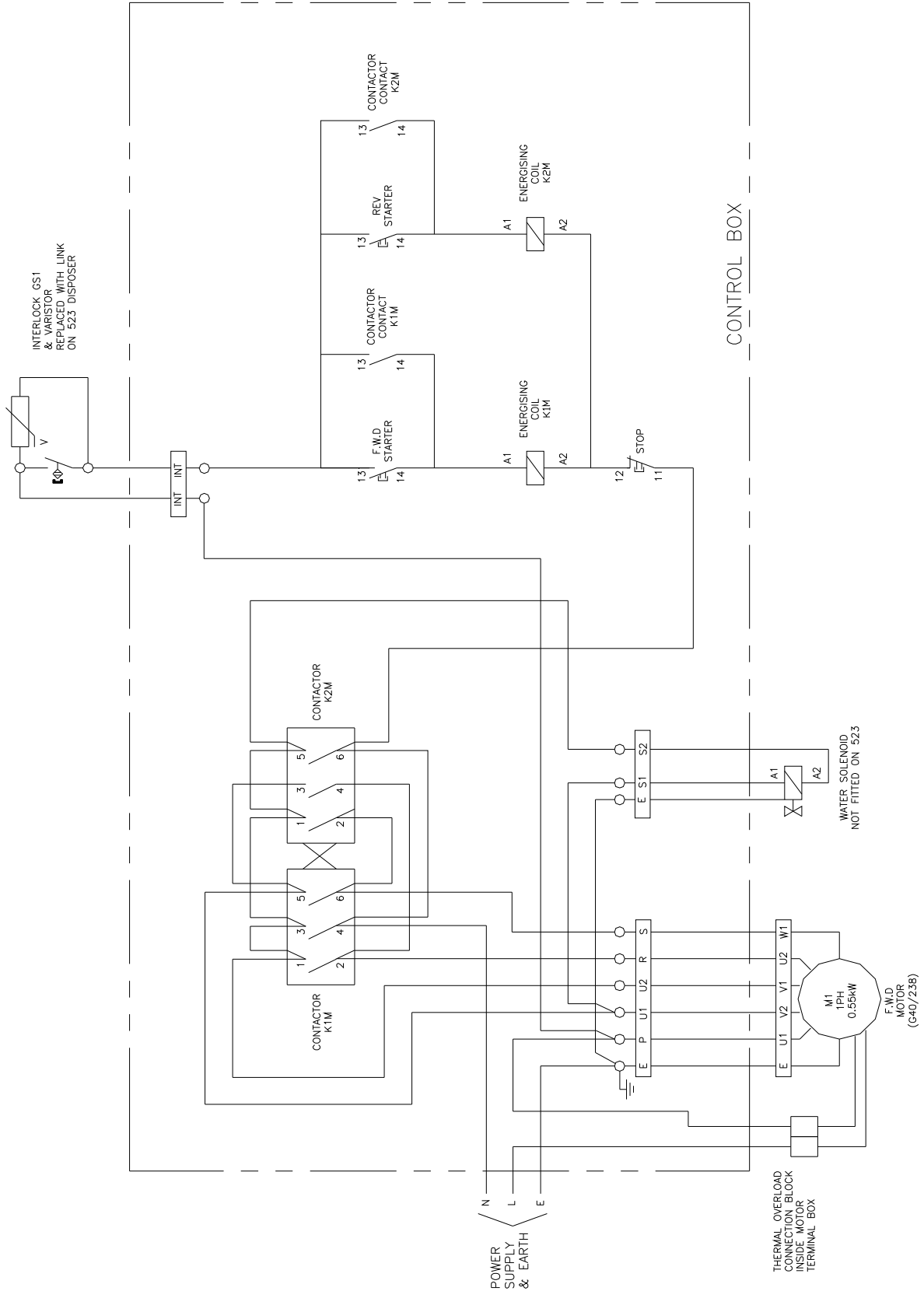


Figure 2 - Wiring Diagram, 3 Phase 4 Wire

For supply: 400 – 3 – 50, 220 – 3 – 50, 440/460 – 3 – 60 & 230 – 3 – 60.

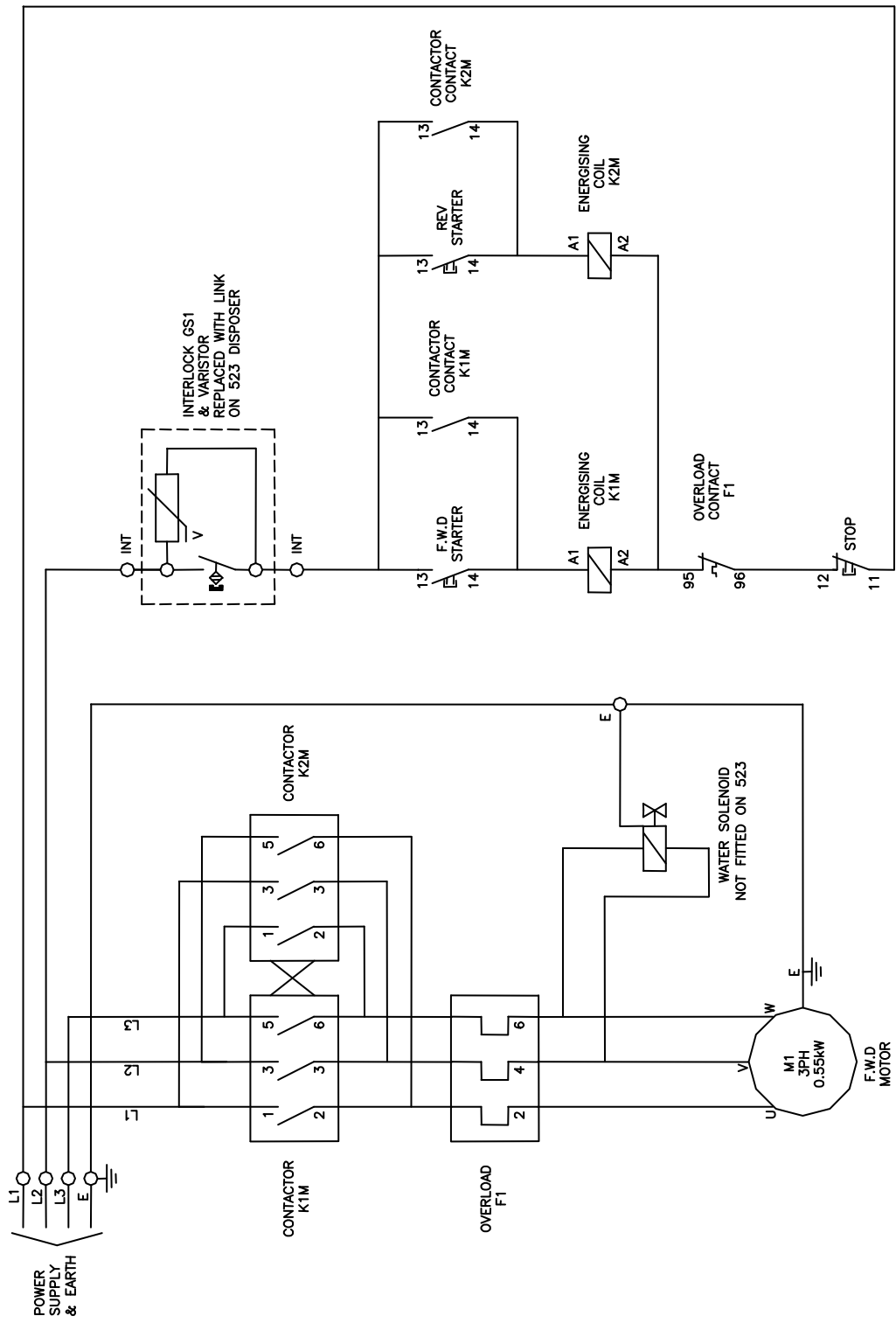
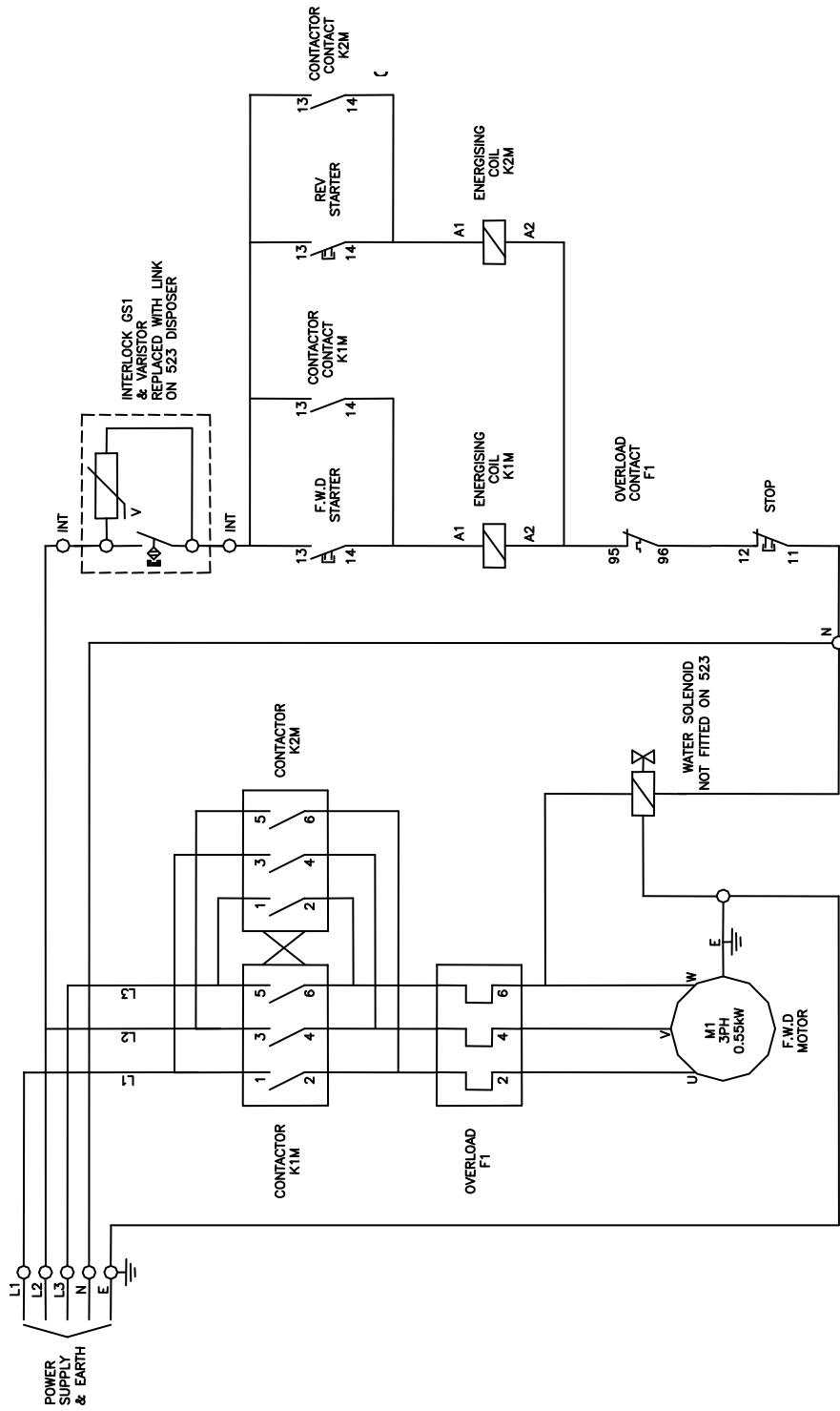
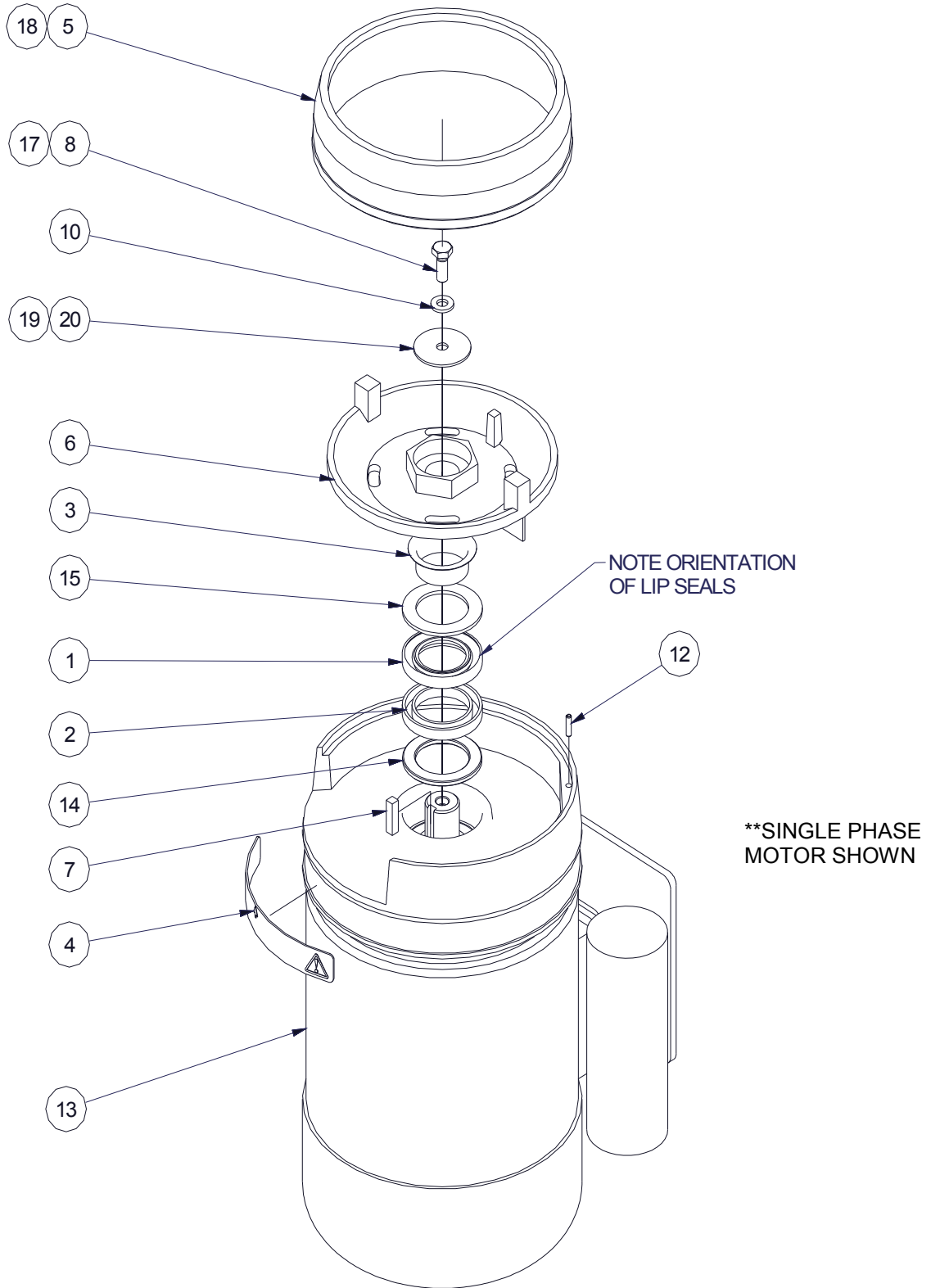


Figure 3 - Wiring Diagram, 3 Phase 5 Wire

For supply: 400 – 3 – 50.



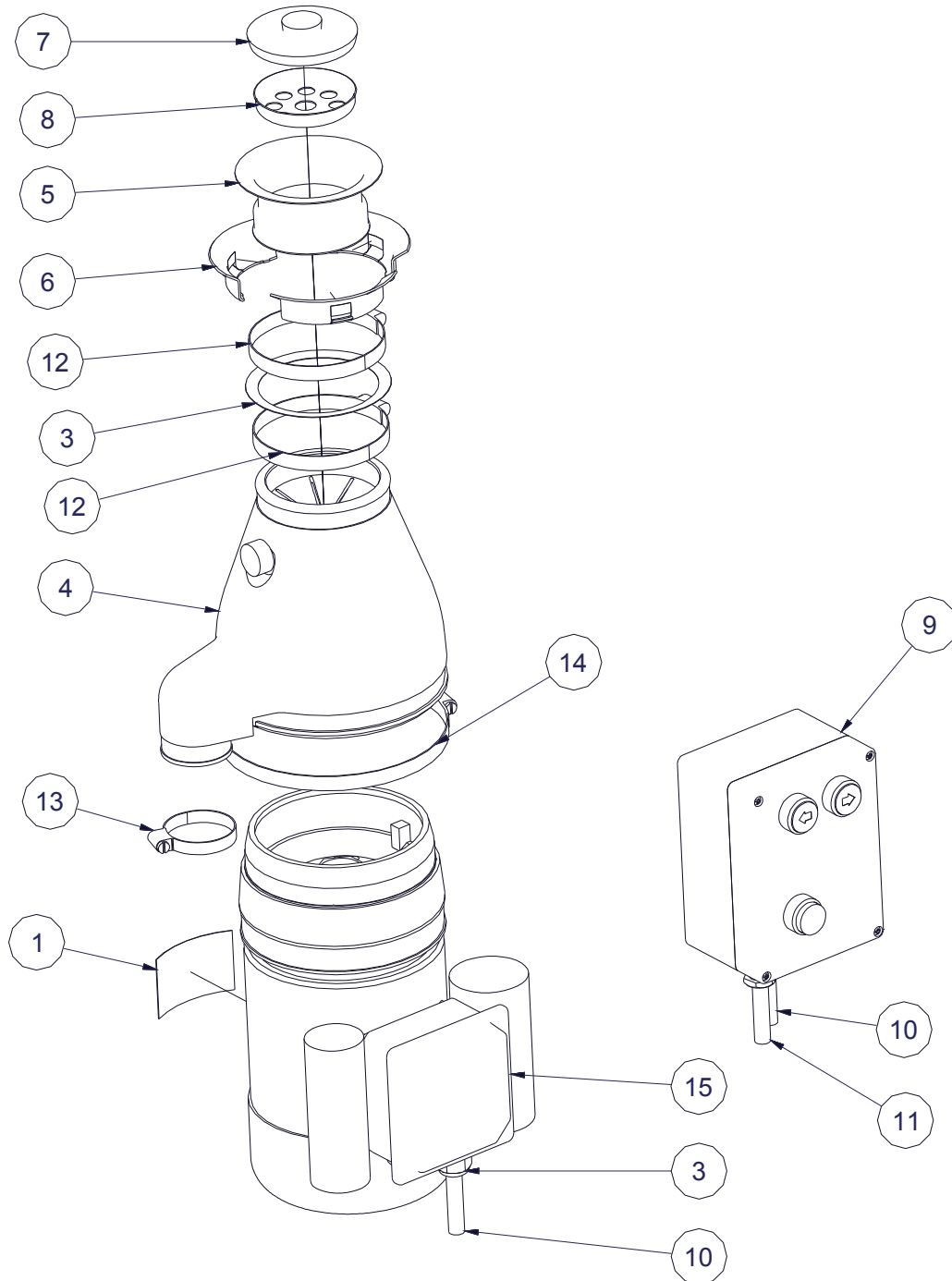
BASIC UNIT EXPLODED VIEW



<b>Item number</b>	<b>Part number</b>	<b>Description</b>
1	A02/050	BROWN LIP SEAL
2	A02/051	BLACK LIP SEAL
3	A02/054	SPEEDI SLEEVE
4	A028/704	WARNING LABEL
5	C14/014-M1	CUTTER
6	C14/023-M1	ROTOR
7	D14/012	KEY
8	D19/039	M6X16L HEX SCREW
9	-	-
10	D25/020	WASHER
11	-	-
12	D26/010	TENSION PIN
13	G40/238	MOTOR 1ph
	G40/223	MOTOR 3ph
14	L52/001	DISTANCE RING
15	E35/076	SEAL PROTECTOR
17	K09/029	LOCTITE 270
18	K09/079	ARALDITE
19	K09/115	HYLOMAR 303 SILICONE
20	D25/085	WASHER

**When ordering spare parts or accessories always quote the SERIES NUMBER of the machine, found on the rating label.**

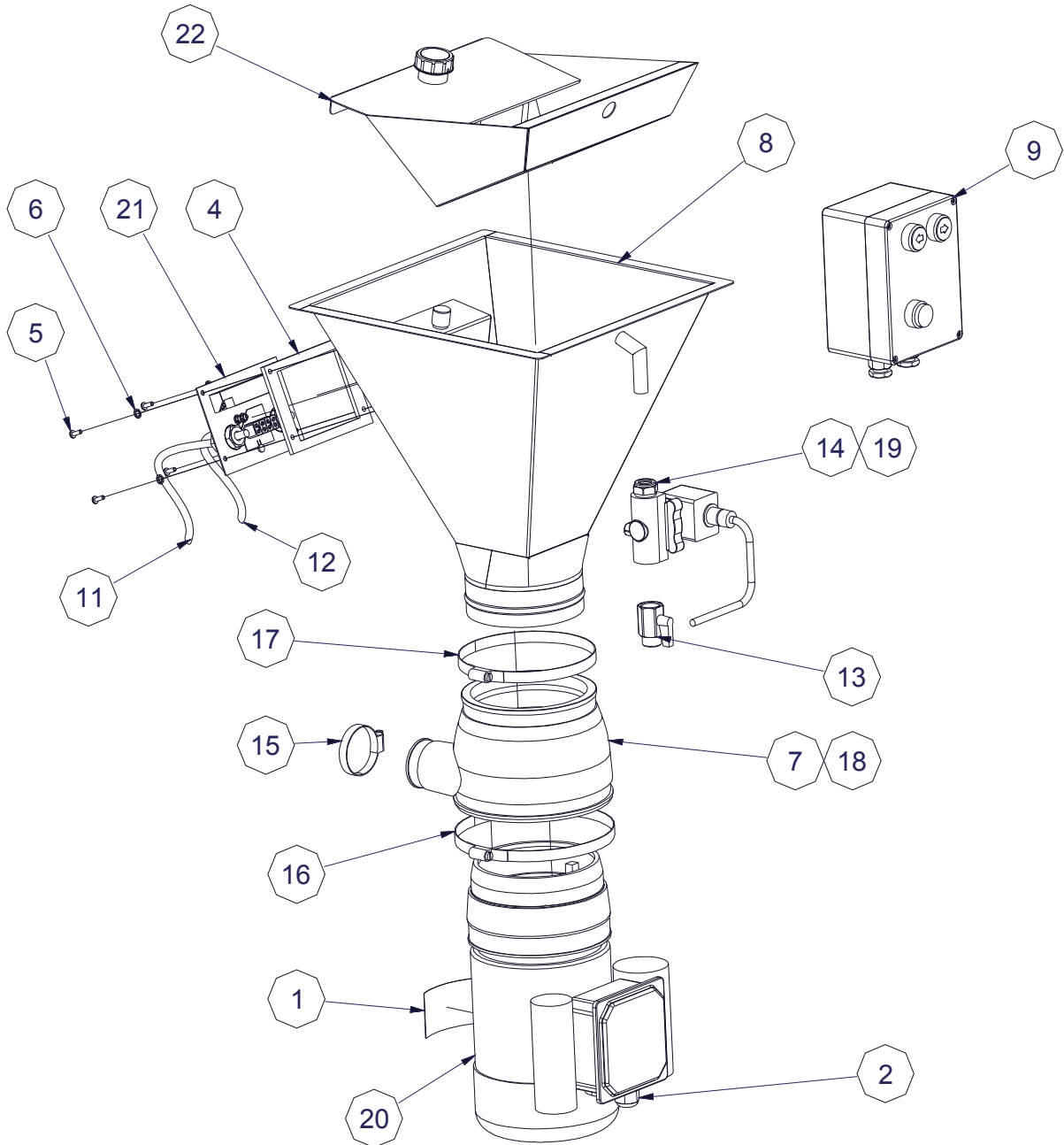
523 EXPLODED VIEW



Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1		1	RATING LABEL
2	A10/280	1	CABLE GLAND
3	A11/027	1	SINK OUTLET GASKET ANGLED
4	E07/018 A	1	RUBBER HOUSING
5	E10/016	1	SINK OUTLET
6	E10/017	3	CLAMP
7	E10/018	1	SINK STOPPER
8	E10/019	1	SILVER SAVER
9	G30/360	1	500 1PH CONTROL BOX
	G30/293	1	500 3PH CONTROL BOX
10	G60/491	1	1PH MOTOR CABLE
	G60/165	1	3PH MOTOR CABLE
11	G60/493	1	1PH MAINS CABLE
	G60/154	1	3PH MAINS CABLE
12	J06/006	2	HOSE CLIP 80-100mm DIA
13	J06/010	1	HOSE CLIP 40-60mm DIA
14	J06/014	1	HOSE CLIP 150-180mm DIA
15	S52/010	1	BASIC UNIT ASSY 500 1PH
	S52/020	1	BASIC UNIT ASSY 500 3PH

**When ordering spare parts or accessories always quote the SERIES NUMBER of the machine, found on the rating label.**

525 EXPLODED VIEW



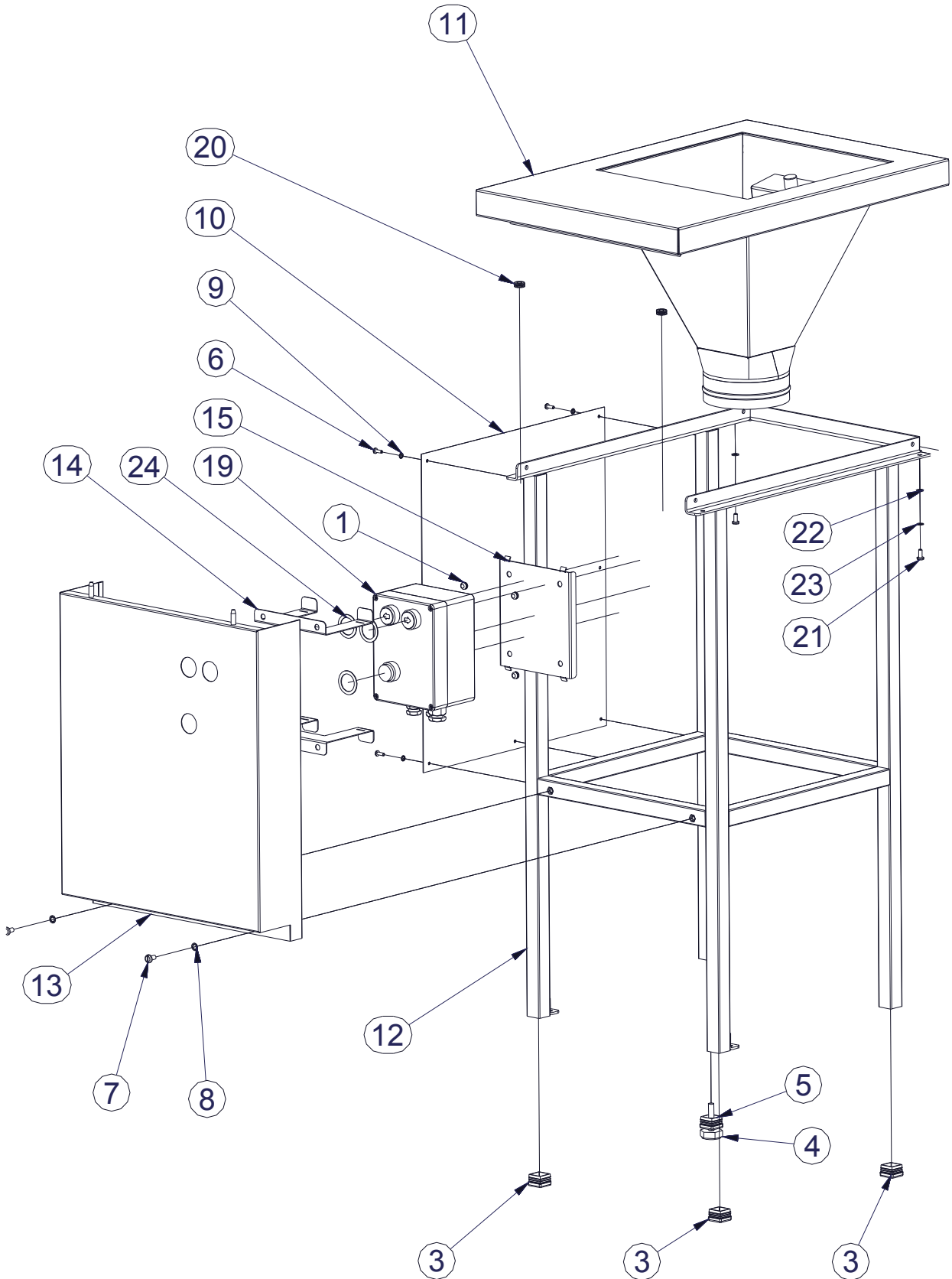


Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1		1	RATING LABEL
2	A10/224	3	CABLE GLAND NUT
3	A10/280	3	CABLE GLAND M20 BLACK
4	A11/176	1	GASKET
5	D21/038	4	SCREW M4 X 12L SS PAN
6	D25/007	4	WASHER M4 SHAKEPROOF SS
7	E07/020	1	RUBBER TOP HOUSING
8	E35/045	1	HOPPER ASSEMBLY 500 FWD
9	G30/360	1	CONTROL BOX ASSEMBLY 500 1 PH
	G30/293	1	CONTROL BOX ASSEMBLY 500 3 PH
10	G60/152	1	INTERLOCK CABLE
11	G60/491	1	MOTOR CABLE 1 PH
	G60/165	1	MOTOR CABLE 3 PH
12	G60/493	1	MAINS CABLE 1 PH
	G60/154	1	MAINS CABLE 3 PH
13	J03/093	1	BALL VALVE
14	J03/144	1	SOLENOID VALVE 1 PH
	J03/145	1	SOLENOID VALVE 3 PH
15	J06/010	1	HOSE CLIP 40-60mm DIA
16	J06/014	1	HOSE CLIP 150-180 DIA
17	J06/039	1	HOSE CLIP
18	K07/063	A/R	SILICONE OIL
19	K09/027	A/R	LOCTITE 542
20	S52/010	1	BASIC UNIT ASSY 500 1 PH
	S52/020	1	BASIC UNIT ASSY 500 3 PH
21	S52/025	1	ELECTRICS PLT ASSY 500 FWD 1 PH
	S52/026	1	ELECTRICS PLT ASSY 500 FWD 3 PH
22	S52/031	1	BAFFLE ASSEMBLY FWD 500

**When ordering spare parts or accessories always quote the SERIES NUMBER of the machine, found on the rating label.**

526 EXPLODED VIEW

ONLY ADDITIONAL PARTS TO THE 525 ASSEMBLY ARE SHOWN



Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	A10/134	4	BLIND GROMMET PV626
2	A10/280	3	CABLE GLAND
3	A13-064	3	INSERT PLAIN 25x16G SQ TUBE
4	A13/056	1	ADJUSTABLE FOOT M8x40
5	A13/065	1	INSERT M8 THREAD 25x16G SQ TUBE
6	D21/038	6	SCREW M4 X 12L SS PAN
7	D21/050	2	SCREW M6x12 PAN SS
8	D25/005	2	WASHER M6 SHAKEPROOF SS
9	D25/033	6	WASHER M4 SHAKEPROOF SS
10	E3/056	1	OPTIONAL SIDE PANEL FWD 526
11	E35/050	1	TOP SURROUND AND HOPPER-500 FWD
12	E35/051	1	FRAME ASSEMBLY FWD526
13	E35/062	2	FRONT PANEL 526
14	E60/006	2	BRACKET
15	E60/007	1	BACK PLATE
19	CONTROL BOX	1	SEE 525 EXPLODED VIEW ABOVE
20	A10-012	2	GROMMET
21	D21/044	2	SCREW M5 X 12 SS PAN
22	D25/021	2	WASHER M5 TYPE A SS
23	D25/004	2	WASHER M5 SHAKEPROOF SS
24	A11/177	3	WATER INLET WASHER

**When ordering spare parts or accessories always quote the SERIES NUMBER of the machine, found on the rating label.**